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PEER EFFECTS IN FINANCIAL DECISION MAKING: EVIDENCE FROM THE U.S. NAVY

by

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PEER EFFECTS IN FINANCIAL DECISION MAKING: EVIDENCE FROM THE U.S. NAVY

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LIST OF ACRONYMS AND ABBREVIATIONS

AFQT Armed Forces Qualification Test

BRS Blended Retirement System

CSB Career Status Bonus

CNA Center for Naval Analysis

CPI Consumer Price Index

DMDC Defense Manpower Data Center

DOD Department of Defense

NPC Navy Personnel Command

PDR Personal Discount Rate

TDA Tax Deferred Account

TSP Thrift Savings Plan

YOS Years of Service

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I. INTRODUCTION

Using field data derived from U.S. Navy personnel records, I estimate the effects of peer influence on U.S. Navy members as they choose between a present cash bonus of \$30,000 or a more substantial retirement pension. Specifically, I examine whether the revealed preference of one's peers influences the pension decision of the individual. Testing the null hypothesis that pension decision and social unit (in this case the members assigned command) are independent, the evidence points strongly to rejecting the null. The results of this study suggest that both peer influence and environmental characteristics play a measurable role in impacting a member's decision. This study seeks to determine how much of this behavior can be attributed to peer influence and how much is a function of correlated effects or common shocks specific to a member's command. Additionally this research assesses the impact of financial literacy and cognitive ability in a member's decision.

At their 15th year of service (YOS) each U.S. Navy service member is required to select between two different pension choices, Redux (also known as the Career Status Bonus) and High-3. While both are pensions with cliff vesting at 20 years, the Redux option includes a lump sum payment at the service member's 15th YOS in exchange for reduced pension payments through the course of retirement (DOD Military Compensation, n.d.). In essence someone choosing Redux is trading future for present consumption. Comparing the two streams of cash over the course of a typical retirement, the High-3 option comes out as the favorable choice when considering net present value. Depending on rank and YOS at retirement service members face break even discount rates between 10-25 percent in favor of High-3 over Redux (Cunha and Menichini 2014). Despite the apparent advantage of High-3, approximately 24 percent of Navy personnel select Redux. While there are likely numerous neo-classical and behavioral economic factors at work in

¹Within the Navy and within the applicable literature the terms CSB and Redux are often used interchangeably. Technically speaking, however, CSB refers only to the bonus element of this option and Redux refers to the reduced annuity one receives as a result of taking the bonus.

this decision this paper focuses primarily on three, peer influence, cognitive ability, and environmental effects.

Peer effects research has seen considerable attention in the last two decades as educators, policy-makers, economists, and sociologists have sought to better understand the impact of social interaction on individual behavior. These studies have covered peer influence in education, social program participation, drug use, crime, retirement savings decisions, and others. The research question relative to each is, did a person perform differently or choose differently because of the characteristics and/or behavior of those around them?

To explain the propensity for members of a group to behave the same, Manski (1993) identified three primary effects, Endogenous, Exogenous (also referred to as Contextual), and Correlated. Keeping with the common convention in peer effects literature I will adopt his terminology to facilitate my discussion. According to Manski, endogenous effects refer to the propensity of individual behavior to vary with the behavior of the group. Exogenous effects refer to the idea that "the propensity of an individual to behave in some way varies with the exogenous characteristics of the group." And Correlated Effects refer to the fact that individuals who share an environment have a tendency to behave similarly. As noted by previous researchers (e.g. Manski 1993; Sacerdote 2000) part of the challenge of peer effects research is separating these three effects. Take, for example the Redux/High-3 decision. Factors making this distinction difficult are common to econometrics, namely endogenous group selection, the identification problem, and the question of correlated unobserved characteristics or endogeneity.

Endogenous group formation refers to homophily, the idea that individuals will naturally gravitate towards others that look and act that same as they do. Researchers have labeled this phenomenon as sorting. Sorting is problematic in peer effects research in that if individuals are free to choose their "peers" endogenously it makes it hard to distinguish whether a certain decision reflects peer influence or merely a preexisting propensity towards that decision. Likewise, if individuals are free to choose their social unit endogenously there might possibly be unobserved characteristics which are correlated with exogenous

variables such as gender, race, age, and intelligence, which induce them to join that unit. As noted by Carrell and Zinman (2014), Lieber and Skimmyhorn (2016), and Lyle and Smith (2014) one benefit of peer effects research in the military environment is exogenous group formation. Rather than self-selecting into their units, members are directed to their commands by centralized personnel systems.

The identification problem in peer effects research is multi-faceted. The primary challenge lies in addressing endogeneity bias or as Manski labeled it, the reflection problem. The reflection problem refers to the challenge of trying to separate the effect of the individual on the group from the effect of the group on the individual. To address the reflection problem I utilize an OLS model in which I estimate the likelihood of an individual selecting Redux conditional on the mean Redux take rate of her peers, controlling for exogenous characteristics such as race, gender, marital status, education level. The mean Redux take-rate of ones peers is calculated by looking at anyone within the social unit (command) who has previously made the Redux decision, regardless of when or where the decision was made. The fact that many coworkers would have made their decision while in another unit is significant for two reasons. First, the method partially controls for contemporaneous shocks or correlated effects. Members making their decision in other commands are free from shocks or environmental factors effecting the individuals on their current ship. Second, this method resolves mechanical correlation and further addresses the reflection problem by ruling out the possibility of inadvertently capturing the effect of the individual on the group.² Finally I add fixed effects for unit and month in an attempt to further address common shocks at the command level. The results suggest that a member is negatively impacted by the mean Redux take rate of her peers. Members with a higher proportion of peers who chose Redux are less likely to select that option themselves. The final

²A separate identification problem in peer effects research refers to the difficult task of separating endogenous from exogenous effects. That is, trying to determine if an observed effect resulted from peer behavior (in this case their revealed Redux/High-3 preference) or from peer background characteristics. Part of the desire to separate the two rests in the fact that endogenous effects have the potential to act as social multipliers while exogenous effects do not. Similar to many peer effects researchers before me, I do not attempt to formally separate these two effects.

portion of this thesis explores the reasons these peer effects might exist and the manner in which they might operate.

The findings of this research are significant to policy makers in both the private and public sectors for a variety of reasons. For DOD leadership a better understanding of how its members make complex financial decisions might help them to optimally frame retirement decisions, manage information dissemination, and formulate future budgets. While the National Defense Authorization Act for FY 2016 (NDAA 2016, P.L. 114-92) does away with the CSB/Redux benefit option, the number and complexity of financial decisions facing service members will only increase as the DOD transitions to the Blended Retirement System (BRS). Service members eligible for the new system will first have to choose whether or not to make the switch. Those that make the switch, and those who enter military service after December 31, 2017, will then select what percentage of their pay to contribute to the Thrift Savings Plan (TSP), in which TSP funds to invest, and whether to take the Lump Sum option when they hit retirement.³ For the DOD, the cost variance associated with these choices is significant. For instance simply considering the percentage of eligible service members who might make the switch to BRS, total costs vary by \$25.6 billion. Likewise, by varying service members TSP contribution percentages between 1 percent and 5 percent (the government matching range), total costs to DOD vary between 12.9 billion and 64.7 billion (Hanlon et al. 2016). These cost ranges illustrate the need for a better understanding of how and why service members make their retirement decisions to more accurately predict retirement outlays for future budgets

Additionally, the findings of this thesis highlight the importance of default settings and the manner in which retirement decisions are framed. In the case of the Redux/High-3 decision, disparity in the manner in which members are presented with their decision is shown to have a large effect on which option they choose. Likewise, individuals assigned

³Under the Lump Sum option a member may elect to receive either 25% or 50 percent of her total future pension payments at the point of retirement. The DOD has not yet released the rate at which Lump Sum will be discounted. This option is similar to the Redux/High-3 decision in that the member must make a decision that factors in inter temporal trade offs.

to commands utilizing an unofficial default option, are significantly less likely to select Redux. The lack of standardization across commands is shown to play a role in the members decision.

The remainder of this paper proceeds as follows: Chapter 2 provides background information on the Redux and High-3 retirement decision as well as a review of the pertinent literature on peer effects and financial literacy. Chapter 3 describes the data and considers the benefits and implications of using the Navy as a setting for peer effect research. Chapter 4 details my empirical framework and methodology. Chapter 5 presents results and explores the link between peer effects and financial literacy. Chapter 6 concludes.

II. BACKGROUND AND RELATED WORK

A. NAVY RETIREMENT AND THE REDUX/HIGH-3 DECISION

Since the end of World War II the U.S. Navy has utilized a defined benefit retirement plan with cliff vesting at 20 YOS. Over the years, minor elements of the retirement system have been modified to fit budget constraints and/or manning needs, however, the system has remained largely the same. Service members do not make any contributions towards the plan but if they leave the service before reaching 20 years they receive no retirement compensation (DOD Military Compensation, n.d.). Under the current retirement system members who entered military service after July 31, 1986 are required to choose between the traditional High-3 retirement plan and Redux when they reach 14.5 YOS.⁴ Both High-3 and Redux are defined benefit plans with cliff vesting at 20 years. However, the Redux plan features a \$30,000 Career Status Bonus (CSB) payed to the service member at their 15th YOS in exchange for reduced annuity payments over the course of their retirement. Under the High-3 option retired members receive monthly annuity payments equal to their average monthly basic pay for their highest 36 months of service times YOS times 2.5 percent. The High-3 annuity is adjusted annually for inflation with the Consumer Price Index (CPI) (DOD Military Compensation, n.d.).

The annuity formula under the Redux option is largely the same, however, the YOS multiplier is reduced from 2.5 percent to 2.0 percent for the members first 20 YOS. Between 20 and 30 YOS the multiplier increases to 3.5 percent and after 30 YOS drops to 2.5 percent. Additionally, Redux features an inflation adjustment that only corrects annually at a rate equal to CPI minus 1 percent. At the age of 62 there is a one-time adjustment that bumps the Redux pension up to the same level as High-3. However, after 62 the pension is

⁴Redux came into effect as part of the Military Reform Act of 1986 in an attempt to control ballooning retirement costs. Redux took the place of the "final three" plan and originally did not include the \$30,000 bonus. The Act was repealed in 1999 over concerns about fairness, before any member retired under the system. The repeal did not do away with Redux but rather left it as an option and included the \$30,000 bonus as a means of making the choice more attractive.

adjusted at the same CPI minus 1 percent rate and therefore decreases over time in relation to the value of the High-3 annuity (DOD Military Compensation, n.d.).

To illustrate the differences between the two plans, a member retiring after 20 YOS under Redux would receive 40 percent of her annual basic pay vice 50 percent under High-3. A member retiring after 25 YOS receives 57.5 percent under Redux and 62.5 percent under High-3, and someone retiring after 30 years would receive 75 percent under either option. Even for those members that remain in service for 30 years, however, the Redux decision proves costly due to the differences in how the two options are adjusted for inflation. For example an E-9 who retired at 30 YOS at the age of 50 would face a total reduction in after-tax retirement pay of \$259,000 by selecting Redux (Quester and Shuford 2005).⁵

On January 1, 2018, the DOD will transition to a blended retirement system consisting of defined benefit and defined contribution components. This overhaul of the retirement system is meant to modernize military retirement making it more comparable to plans found in the private sector. Under the current Redux/High-3 system members who leave military service prior to 20 YOS receive nothing. According to the DOD's military pay site 81 percent of service members leave the military before reaching 20 YOS and therefore receive nothing towards their retirement. Under the BRS members will have the option to contribute to a personal TSP accounts and receive government matching between 1-5 percent of their base pay. BRS will retain a defined benefit component for those that remain for 20 YOS, however, the YOS multiplier is reduced from 2.5 percent to 2.0 percent. While the BRS will not retain the Redux/CSB option, it does feature a similar element in the form of a lump sum payment for those members that qualify for the defined benefit portion. Service members will have the option of taking either 25 percent or 50 percent of their future monthly annuity payments up-front in exchange for a reduced annuity from the point of retirement until the member reaches age 67 (DOD Military Compensation, n.d.). The DOD has yet to release the rate at which the lump sum will be discounted. Regardless,

⁵Calculation assumes the service member will live to age 79, military pay and CPI will grow at the traditional 3.5 percent per year, and the member is in the 15 percent federal tax bracket.

however, the decision will be similar to the Redux/High-3 decision in that members will be considering two different streams of income, one present, one future, and will be required to calculate the value of each before making their inter-temporal choice.⁶

1. How the Redux/High-3 Decision is Framed

At precisely 14.5 YOS every Navy officer and enlisted member receives an official Navy message from the Navy Personnel Command informing them that they are eligible to "elect a \$30,000 Career Status Bonus and Redux retirement pay" on their 15th anniversary of active duty (DON Initial Notification Message, 2016). ^{7,8} This message is typically forwarded via email to the individual by their command admin office as many officers and enlisted do not check message traffic on a daily basis. The message starts out with a thorough explanation of the two options, outlining the various features of each. The message references a study done by the Center for Naval Analysis (CNA) quoting, "the best way to look at the choice of receiving the CSB is to consider the career status Bonus as an early cash-out "loan" to be paid back later by smaller retirement paychecks." The message goes on to provide the following example, also taken from the CNA study. An E-6 with 20 YOS at retirement who elects to take the "CSB and Redux at 15YOS pays an implicit interest rate of 10.4 percent for the cash out and looses \$193,630 after-tax retirement income assuming the Sailor lives to an average age of 79 years" (DON Initial Notification Message, 2016). The message repeatedly stresses the significance of the decision and encourages members to seek out financial advice from command counselors and trusted financial advisers. Within the message are links to various government websites that offer additional information about the decision. These include the Navy's Center for Career Development, and the DOD's military pay site. The message concludes by stressing that members should put enough effort into the decision to make them comfortable with their choice. Specifically it states, "Command Career Counselors and Command Financial Advisers are standing by to

⁶Additional information on the BRS can be found at http://militarypay.defense.gov/BlendedRetirement/

⁷Provided their Date of Initial Entry into Military Service (DIEMS) is after 31 July 1986.

 $^{^8}$ A copy of this message from 2016 is included in Appendix A. A large portion of the message is taken directly from NAVADMIN 0344/02

assist you with your decision, but ultimately, only you can determine which option is more advantageous for you based on your own unique circumstances and preferences" (DON Initial Notification Message, 2016).

The notification message highlights an interesting aspect regarding how the decision is framed. The message gives no mention of a default setting and informs the individual service member and her chain of command that they must complete the election form regardless of which option she prefers. In the message it stipulates that once received the member has "6 months as of the date of this message to make an election decision" (DON Initial Notification Message, 2016). Nowhere in the message does it mention what would happen if a Sailor failed to submit their election form. If, after three months, the member has failed to submit her election form she receives a second and "final" message that lets her know her "opportunity to elect CSB will soon expire." This message is considerably shorter and informs the member that if no entry is received prior to their 15th anniversary it "will result in automatic default to High-3 retirement program" (DON Second Notification Message, 2017). Why this default element is not spelled out in the initial message is unclear.

If a member elects to take the CSB and accept Redux they are given 5 different options for payment. These options include one payment of \$30,000, two installments of \$15,000, three installments of \$10,000, four installments of \$7,500, or five installments of \$6,000. This installment payments are elected, the second and subsequent installments are paid on 15 JAN of each succeeding calendar year" (DON Initial Notification Message, 2016). This feature allows members to deposit the entire bonus into their TSP accounts without exceeding the IRS limit for annual contributions. The \$30,000 bonus is taxed at the members federal tax rate. If applicable, state taxes are also deducted. Once the member has elected to take the CSB the decision and payment option are irrevocable. Additionally, members who elect to take the CSB and Redux are required to remain in service for a

⁹A copy of this message from 2017 is included in Appendix B

¹⁰Regardless of which option they choose the first payment is paid to the service member "no later than the first month that begins on or after the date that is 60 days after the date the election is effective."

minimum of 20 years (DON Initial Notification Message, 2016). However, this is typically not a significant factor as very few service members voluntarily separate between 15-20 YOS due to the cliff vesting nature of both options.

2. The "Default"

Although the initial notification message instructs the member and her administrative department to complete and submit the election form regardless of her choice, only 30 percent of the members in this study did so. Of those who completed their election form 59 percent selected Redux. This percentage is much higher than the overall Navy take rate of 24 percent due to the fact that if a member wants to take the bonus the only way she can do is by submitting the election form. Therefore 100 percent of Redux takers sent in their election form, while only 15 percent of High-3 takers sent in their form. The other 85 percent of High-3 takers completed no action and selected High-3 passively through default.

As mentioned the notification message sent to each individual member explicitly states that members must take action and submit their election form. The message assigns responsibility to the members administrative office and the members direct superior in completing the election process. According to the message, "Administrative Officers are responsible for ensuring this message is delivered to the commissioned officers and warrant assigned to the command; and their elections are processed through DFAS. Command Career Counselors (CCC) are responsible for ensuring this message is delivered to enlisted members of your command; and that their elections are processed through DFAS" (DON Initial Notification Message, 2016). The message then goes on to further specify additional responsibilities of the Administrative officer and CCC. Namely, that they are responsible for completing Section I of the election form, ensuring the members direct superior completes Section II of the form, advising the member of various elements of the decision, ensuring the member completes Section III of the form, and then posting the members election data in the Navy's Force Management Data System. Despite these instructions a

majority of Navy administrative departments do not complete the members election process as instructed. While the data does not shed light on why they do not follow the messages instructions it is likely a matter of these departments wanting to reduce paperwork. If they are only completing paperwork for those that take the CSB their workload is significantly reduced.

Due to the fact that the majority of the responsibility in completing the election form falls on the administrative department the percentage of individuals completing the election form is largely clustered at the command level. Approximately 13 percent of the commands in this analysis completed the process as prescribed, the other 87 percent have largely abandoned the process and only submit election forms if the member chooses the CSB/Redux option. As a result of the disparity you have one segment of the Navy operating as if there is no default option while another operates as if their is a default. This phenomena, while clearly unintentional, affords the opportunity to gauge the impact of having a default. By comparing commands that ensure their members actively choose a retirement option with those that inform their members about the default "option," we can obtain a rough measurement of the impact of the default.

Madrian and Shea (2000) highlight the importance of defaults in determining savings behavior. In a study of 401(k) participation they found that default enrollment into the savings program led to significantly higher rates of participation and that default contribution rates were largely left unchanged. Choi et al. (2005) found similar results noting that individuals making retirement savings decisions will often follow "the path of least resistance." The Redux/High-3 choice is a complex financial decision that involves concepts such as net present values, compounding interest, break even discount rates, etc. The fact that Navy members must select a retirement option vice being automatically enrolled in the safer option implies the Navy is forcing some of its members to make a financial decision that some may not be equipped to make. Its important to note that this fact may increase the magnitude of peer effects observed in the Redux/High-3 decision.

B. LITERATURE REVIEW

1. Previous Redux/High-3 Research

There have been multiple studies conducted on the Redux/High-3 decision. Cunha and Menichini (2014), and Simon et al. (2015) each utilized the Redux/High-3 decision to estimate implied personal discount rates (PDR). Both studies also estimate the correlations between demographic characteristics and the Redux decision. Their results are very similar. Each study finds positive correlation between selecting Redux and factors such as being black, male, married, and scoring lower on the Armed Forces Qualification Test (AFQT). Likewise both studies found that being female, more educated, and/or single were correlated with selecting High-3. When it comes to a members cognitive ability and selecting Redux, Simon et al. (2015) estimate that each 10 percentage point increase in AFQT reduces a members likelihood of selecting Redux by 2.6 percent (p <0.01). Both studies also highlight the fact that Redux take rates have been been gradually decreasing year to year since its induction.

To compliment their administrative data, Simon et al. (2015) utilize a 2008 Defense Manpower Data Center (DMDC) survey which focuses specifically on the Redux/High-3 decision (DMDC 2008). ¹²This data provides an interesting perspective on the financial situation of those who made the decision between 2001 and 2008. The target populations for the survey consisted of active duty members of the Army, Navy, Air Force, and Marine Corps who had at least 15 YOS, and were eligible for the High-3 or Redux retirement programs. The report only included responses from members still on active duty. While the survey did not test for financial literacy it did ask questions pertaining to saving habits, TSP participation, car loans, and whether or not respondents had experienced financial problems. Specifically, it asked if respondents had experienced bounced checks, missed

¹¹The AFQT is a nationally normed cognitive ability test given to all enlisted military applicants. A score of 60 means that the Sailor, Soldier, Airmen, or Marine scored in the 60th percentile in ability.

¹²DMDC received 19,272 completed surveys of which 13,461 were deemed usable. Data were weighted using the industry standard three-stage process with adjustments for selection probability, known population values and nonresponses.

car payments, bankruptcy, foreclosure, or had their electricity shut off in the previous 12 months. The report offers interesting insight into the financial health of both Redux takers and non-takers.

When asked to select an option that best described their financial condition Redux takers were 75 percent more likely to answer "tough to make ends meet but keeping my head above water" than were non-takers (DMDC 2008). In the 12 months preceding the survey Redux takers were 150 percent more likely to fall behind on their mortgage and 100 percent more likely to bounce two or more checks. They were also 150 percent more likely to report having their telephone, cable or internet shut off. When asked if they currently participated in TSP, 42 percent of Redux takers answered yes compared with 50 percent for High-3.¹³ High-3 takers also reported higher levels of TSP contribution. When asked how they used the \$30,000 bonus, 83 percent of Redux takers reported using at least a portion of the bonus to pay off debt, 44 percent invested some of the money, and 16 percent reported using the bonus as a down payment on a home (DMDC 2008). The survey concluded with a question asking respondents whether they still felt, in hindsight, they had made the right decision when choosing between Redux and High-3. To this question 63 percent of the Redux takers said yes, they still felt they had made the right decision, compared to 95 percent of non-takers. It is important to remember that all survey respondents were preretirement and had yet to feel the results of their decision through their respective monthly annuity payments.

As noted the DMDC survey does not directly measure financial literacy and clearly cannot be used to establish causation between financial literacy and selecting Redux, however, it does suggest a relationship between the two. In every single question that might be viewed as a measure of financial health the respondents who selected Redux scored lower.

¹³Unfortunately there was not a question asking if they participated in TSP at the time of their Redux/High-3 decision.

2. Peer Effects Literature

The most mature body of literature when it comes to peer effects research is in Education. While researchers have used many different methodologies, in a variety of settings, the goal of these studies is primarily the same. Researchers want to know if ones peers effect a students outcome. Does the performance of a student improve with the addition of higher performing peers? Sacerdote (2011) provides a thorough review of the literature on peer effects in student outcomes and notes that the linear-in-means model used in many of the early studies produced mixed results. Some studies showed positive and significant effects (Vigdor and Nechyba 2007; Betts and Zau 2004) while others found little evidence of peer effects (Burke and Sass 2008; Angrist and Lang 2004). He notes, however, that these seemingly contradictory results can be reconciled by rejecting the "linear-inmeans and Single-Crossings models as standalone models of peer effects." He notes that evidence taken from Hoxby and Weingarth (2005), and Imberman et al. (2009) supports "boutique" and Focus models of peer effects in which students at the top and bottom of the performance spectrum benefit from the addition of similarly performing students. Another finding that resulted from peer effects research in post-secondary settings is the prevalence and magnitude of effects in social outcomes. While studies found only modest evidence of peer effects impacting academic outcomes, they found stronger evidence that peers were influential in social decisions such as alcohol consumption, drug use, sexual activity, and whether to join a fraternity (Duncan et al. 2005; Sacerdote 2000).

In addition to education, peer effects researchers have explored a wide range of settings in an attempt to gauge how the actions or decisions of individuals are affected by those they interact with. These include neighborhood effects, social program participation, savings decisions, and securities purchases among many others. Case and Katz (1991) find significant neighborhood peer effects in outcomes such as drug and alcohol use, likelihood of criminal activity, church attendance, and truancy. In a similar study, Brown et al. (2008) find evidence of neighborhood effects in stock market participation among members of the same community. Grinblatt et al. (2008) find evidence of neighborhood peer effects

impacting the automobile purchases of residents in two Finnish communities. Dahl et al. (2014) use a regression discontinuity design to study peer influence as it relates to paternity leave participation in Norway and find evidence of peer effects in the state sponsored program. Duflo and Saez (2002) look at peer effects in participation among university employees in a Tax Deferred Account (TDA). Using instrumental variables they find evidence of peer influence affecting the participation rates and vendor choice of various offices throughout the campus. Kaustia and Knüpfer (2012) find evidence that the performance of peer stock market holdings has a strong positive effect on an individuals decision to enter the market. Bursztyn et al. (2014) use a field experiment in Brazil to study peer effects in the sale of financial assets. The structure of their experiment afforded them an opportunity to identify not only peer effects but also the channels through which they operated. They found evidence of peer effects operating through both social utility and a social learning channels.

As noted in the introduction the military environment affords researchers a sizable advantage when it comes to peer effects research. The fact that units are largely exogenously formed helps to solve for some of the identification problems noted previously. Carrell et al. (2008) utilize the exogenous placement of incoming freshmen into squadrons (similar to dorms) at the U.S. Air Force Academy and identify positive peer effects in both academic outcomes and athletic participation. Applying these results Carrell et al. (2013) attempted to improve the academic performance of low achieving students using assortative matching when placing students into squadrons. Interestingly, they found their systematic sorting produced a negative treatment effect. Rather than an increase in achievement amongst the lower performing students they reported a slight decrease which they attribute to endogenous sorting within the squadron. Brady et al. (2015) use exogenous placement of incoming Naval Academy freshmen into Companys (similar to dorms) and find negative peer effects at the Company level, however, positive effects at more narrow social units. They suggest the change in signs is a result of differences in the channels through which the peer effects operate in the different sized social units. Lyle and Smith (2014) find

that high-performing mentors in the U.S. Army officer corps affect job advancement in their subordinates partially through peer effects. In a study that closely resembles this one, Lieber and Skimmyhorn (2016) explore peer effects in the financial decisions of young Army soldiers reporting to the first command. Looking at four different observable outcomes (financial decisions) they find mixed evidence of peer influence. In the two financial decisions made in a social setting, in which others observe their behavior, they noted positive effects. However, in the two decisions that were made in private they find no evidence of peer effects. Lieber and Skimmyhorn also note the importance of institutional choice architectures, namely how the choice is framed and the presence of default settings. Similar to Choi et al. (2003) they observe that default settings may act as a substitute for peer influence. When default settings are present it is less likely that an individual will rely on his peers to assists with the decision.

3. Financial Literacy Literature

While the data used in this thesis do not afford the opportunity to explore the effects of financial literacy in a quantitative manner, financial literacy has been proven to play a role in numerous other financial decisions and will therefore be explored qualitatively. The effects of financial literacy on financial decision making have been well documented. Bayer et al. (2009) examine the effects of financial education on financial decision-making and conclude that employer provided financial training has a sizable effect on employee partic-ipation in and contributions to voluntary savings plans. These effects are seen most dra-matically in "non-highly compensated employee's" and are correlated with the frequency of the training sessions. Lusardi and Mitchell (2006, 2007a, 2009) find that individuals with low financial literacy are less likely to plan for retirement. Behrman et al. (2012) find that both level of education and financial literacy are strongly positively correlated with wealth outcomes. Agarwal and Mazumder (2013) analyze the relationship between cognitive ability and sub-optimal financial decisions and find that consumers with higher cognitive ability (measured with test scores such as the AFQT) are less likely to make

mistakes when it comes to things like credit card balance transfers and deciding between mortgage rates. Lusardi and Tufano (2009) find that individuals with low debt literacy tend to spend more when borrowing, incurring higher fees and settling for higher interest rates. Similarly Hastings et al. (2013) find that people with low financial literacy are less likely to choose mutual funds with lower fees.

Additional literature also notes that financial literacy alone is not enough to ensure that individuals choose the most advantageous financial outcome (Shanteau and Stewart, 1992). The field of behavioral economics has produced considerable evidence that a various array of behavioral factors and cognitive biases also effect these financial decisions. For examples see Thaler and Shefrin (1981), Thaler (1985 2016), Kahneman (2011), Kahneman et al. (1991), Ariely (2008).

Researchers have also highlighted the importance of default settings on retirement savings behavior. Specifically looking at defined contribution pension plans Choi et al.(2002) examine the effects of 401(k) plan features such as employer matching provisions, eligibility requirements, and financial education on savings behavior. Their findings highlight the significance of passive decision-making and the fact that households overwhelmingly accept default enrollment and default savings rates. A common theme between the 401(k) plan elements they study is the that individuals will typically follow the path of least resistance when it comes to savings behavior. Despite good intentions many fail to spend the time to change settings. They conclude that policymakers should consider the importance of defaults when planning defined contribution plans in order to optimize the savings behavior of their employees. Choi et al. (2005a) develop a theory of optimal defaults based on the ideas that opting out of a default is costly and that people have a propensity to procrastinate. They suggest that optimal default rates can be found at either the minimum savings rate, the matching threshold, or the maximum savings rate.

III. THE DATA AND PEER EFFECTS IN A NAVY SETTING

A. THE DATA

This research utilizes a panel data set provided by the Navy Personnel Command (NPC), via an Enterprise Information Management Services request, which captures every Navy member who made their Redux/High-3 decision between 2006 and 2011. The data set is at the individual level and contains demographic information on 46,708 members with monthly snapshots for each member identifying to which command they were assigned. In total the data set contains over 7,000,000 observations. After consideration officers were dropped from the sample for two primary reasons. First, in the Navy, enlisted and officers predominately interact within their respective social units. Especially in a social context. Fraternization rules restrict relationships between officer and enlisted from anything that might be construed as "unduly familiar". Second, this thesis looks to estimate the effect of peers rather than the effect of a superior who may be acting in an advisory role.

One limitation of the data set is the fact that it contains only information on members who made their decision between 2006 and 2011. Therefore, for a member making her decision in 2006, her "peer" group consists only of other members who had previously made their decision in 2006. As a result for the first years of our study, I have an incomplete picture of an individuals peer group. However, with each consecutive year the picture becomes more complete and my sample size increases. Additionally with each added year I increase the proportion of peers who made their decision outside the individuals unit, meaning that with each consecutive year contemporaneous shocks are increasingly controlled for. For these reasons I focus my analysis on the last two years of the data set, 2010 and 2011. Table 1 provides summary statistics for every Navy enlisted member who made their Redux/High-3 decision in this time period.

	Sample		
VARIABLES	mean	sd	
Chose Redux	0.197	0.398	
Gender (male)	0.874	0.332	
White	0.608	0.488	
Black	0.233	0.423	
Asian	0.0872	0.282	
Other race	0.0702	0.256	
Divorced	0.109	0.312	
Single	0.0818	0.274	
Married	0.809	0.393	
Number of Dependents	2.700	1.573	
High School	0.802	0.398	
College Degree	0.165	0.372	
Graduate Degree	0.0244	0.154	
Command w/o a Default	0.128	0.334	
Observations	11,431		

Table 1: Summary Statistics. Data from Navy Personnel Command (personal communication, 2017).

The summary statistics show that roughly 20 percent of the sample selected the Redux option, the sample is 87 percent male, 61 percent white, etc. Of note, "Command w/o a Default" signifies roughly 13 percent of individuals in the sample were assigned to commands that had their members complete their election form as prescribed by NPC. The term "No Default" come from the idea that these commands did not allow their member to simply do nothing and wait to be defaulted to High-3.

Looking at the mean Redux take-rates across Navy commands we see significant variation. Figure 1 shows the mean Redux take-rate across the 2443 commands in the sample. For comparison, if we look at commands who had at least 10 members make their Redux/High-3 decision, 19 commands had a mean Redux take rate of 100 percent while 400 commands had a mean Redux take rate of 0 percent. Therefore the far left column in Figure 1 represents the 400 commands whose members exclusively chose Redux.

Another limitation of the data is the lack of a true measure of financial literacy. Consideration was given to using post-secondary education and high AFQT scores as proxies to signify members with high financial literacy, however, these measures are imprecise.

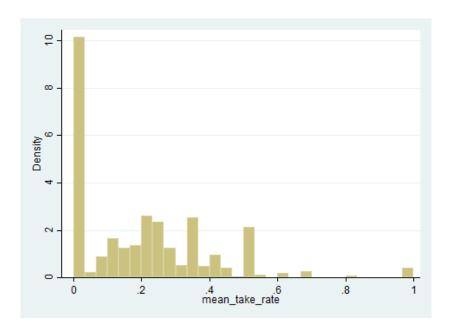


Figure 1: Mean Redux Take Rates across Commands. Data from Navy Personnel Command (personal communication, 2017).

While a college education and higher cognitive ability may increase the likelihood of an individual possessing higher financial literacy they do not directly translate as such. Therefore in the regression analysis I explore the interaction of cognitive ability (as measured by AFQT) and peer effects.

B. PEER EFFECTS IN A NAVY SETTING

For the purpose of this study peer groups are defined as individuals assigned to the same command. Within the Navy a command may be a ship, aircraft squadron, medical center, or staff office. Generally commands are broken down into two groups, shore commands and sea commands. Sea commands are the operational units that deploy, namely the ships and squadrons. Shore commands are made up primarily of training units and support organizations. The typical Navy member will alternate between sea and shore duty, on average, every three years.

¹⁴Some staff positions within the Navy are also sea duty commands, for example Carrier Strike Group (CSG) and Destroyer Squadron (DESRON) staff UICs contain sea-going billets.

In addition to Lieber and Skimmyhorn (2016) and Lyle and Smith(2014) other studies have used the exogenous placement of service members into their units to facilitate research. Carrell and Zinman (2014) use exogenous assignment of Air Force personnel to examine the relationship between access to payday lending facilities and individual well-being. Testing for exogeneity they find minimal correlation between assignment and demographic characteristics Antecol and Cobb-Clark (2008) use the exogenous assignment of Army personnel to study racial and ethnic discrimination in local consumer markets and also find assignment to be uncorrelated with demographic characteristics. Similarly Lleras-Muney (2009), researching the effects of pollutants on children's health, finds no correlation between Army personnel assignments and characteristics such as gender, age, education, and number of dependents.¹⁵

This research relies on the fact that officers and enlisted members are assigned to their ships by a centralized personnel system as a source of variation and to help resolve the identification problems discussed in the introduction. While members have limited say as to where they are stationed their choices are always restricted to the openings for which they have the requisite skill set and that fit their transfer timing. Furthermore, their desires are always secondary to the "Needs of the Navy." With limited bodies to fill limited positions Navy billeting often comes down to the Navy Personnel Command simply placing "the square peg in the square hole." Another aspect of the Navy that ensures members are not sorting into commands based on individual characteristics is the near constant influx and departure of individuals every 2-5 years. Different ranks and rates have varying tour lengths, however, the vast majority fall into the 2-5 year span.

Another factor which makes the military a good fit for peer effects research is the high level of social interaction between members assigned to the same unit. Navy commands are made up of clearly defined and tight knit social groups. Sailors attached to a ship not only work with each other as typical co-workers but they routinely live within the close confines of the ship together for extended periods of time. This means, sharing

¹⁵See also Lyle (2006) and Johnson (2000)

meals, workouts, watches, and berthing spaces. These factors lead to high levels of interaction relative to other work environments and ample opportunity for peers to influence one another.¹⁶ The Navy also represents a fairly accurate snapshot of the American population with regard to racial diversity and educational backgrounds.¹⁷

Additionally, the Redux/High-3 decision, in particular, offers features that lend itself well to peer effects research. First every member makes the decision at the same point in there career and at roughly the same age. (At an average age of 37 for officers and 35 for enlisted.) Considering that within the military individuals typically associate with others of the same rank and seniority, this means that people are making the decision at roughly the same time as those they most closely interact with. Furthermore, thanks to the military rank and pay structure these individuals fall into almost exactly the same income bracket. Additionally each service member receives the exact same notification message and is presented with identical information. The message points members to the same government websites further ensuring that individuals are provided with common information. Whether or not they choose to use the tools at their disposal is up to the individual and likely varies considerably depending on individual characteristics.

An area in which the Redux/High-3 decision differs from previous research on peer effects in things like program participation or TDA contribution is the one time nature of the choice. Unlike other scenarios where the individual can choose to opt-in a various times, the Redux/High-3 choice if offered only once and their choice is irrevocable (DON Initial Notification Message, 2016).

Finally, one aspect of the Redux/High-3 decision that complicates the identification of peer effects is the role of the members command administrative department. The

¹⁶In this regard, the peer effects found in this study might not be found at the same level in civilian work environments.

¹⁷One of the few area's that is significantly different is the percentage of females. While roughly 18 percent of active duty Navy personnel are female, the Department of Labor reports that as of 2016 women comprise 47 percent of the total U.S. labor force. Also note that in this data set females comprise only 12.6 percent of the population.

¹⁸This is not the case if looking at both officers and enlisted. Another reason why I did not include officers in the analysis.

Administrative Officer, Command Career Counselor, and the Command Financial Advisor all play a significant role in notifying the member, providing him with information, and processing her decision (DON Initial Notification Message, 2016). Their influence likely plays a role in the members decision and represents the most significant contemporaneous shock.

IV. EMPIRICAL FRAMEWORK AND METHODOLOGY

The first step I took in my analysis was to calculate the mean take rate of each individual's peers at the time when he or she made their decision. Relying on the monthly snapshots I calculated the peer mean Redux rate for individual i by looking at every other individual within the command who had at least 15 years of service and had therefore already made their choice. Figure 2 shows the variation of Peer Redux Mean across the whole sample. To ensure that I did not capture the individuals choice, mean Redux for individual i was calculated when he or she was at 14.5 years and only included peers with over 15 YOS. By lagging the calculation by 6 months and not including the individuals decision in the mean I control for mechanical correlation, as well as the reflection problem. In this manner, I reduce the chance that individual i's decision is driving his peers decisions and thus confounding our results. This model also, partially, addresses the problem of contemporaneous common shocks that might be biasing our estimates in that an individuals peer group will consist of some members who made their decision in other commands. If for example a ship had a Command Career Counselor who felt strongly that High-3 was the better option and encouraged her Sailors to select High-3 our peer effects estimates would be upwardly biased. Rather then picking up the influence of peers we would be seeing the effect of the common shock.

Relying on the exogenous placement of individuals into their command, model (1) estimates the effects of peer influence on an individuals Redux decision using an OLS method which treats the mean Redux take-rate of ones peers as the treatment variable and includes controls for various exogenous characteristics such as gender, age, race, marital status, and number of dependents.

$$y_{iut} = \alpha + \beta \hat{E}_{t-1}(y|x) + Z\gamma + u \tag{1}$$

Model (1) explains that the Redux decision y of individual i in unit u at time t is affected

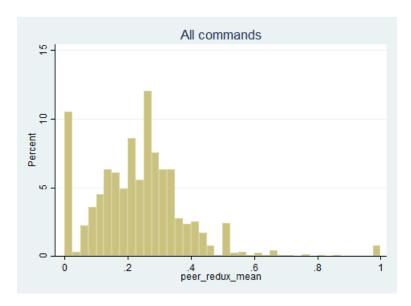


Figure 2: Variation of Peer Redux Mean. Data from Navy Personnel Command (personal communication, 2017).

by the mean of y in ones ship x (E(y|x)) at time t-1, and by individual characteristics (Z,u). γ is a set of variables that capture the effects of exogenous characteristics Z on i. β is the primary coefficient of interest and captures the effect of ones peers on an individuals decision.

This model, however, only partially controls for contemporaneous shocks that might be biasing my estimates. As mentioned the Command Career Counselor and/or Administrative Officer are in positions where they could easily influence the decision of individuals in their command. Additionally, there could be other common shocks in our error term that are correlated with the peer mean Redux rate and therefore add bias to our results. For example within a single ship Redux take rates might be cyclical depending on where the ship was in its deployment cycle. Another common shock might be the opening of a new car dealership directly adjacent to the ships homeport base. To further control for these shocks model (2) includes fixed effects for command and month. These fixed effects are represented by δ .

$$y_{iut} = \alpha + \beta \hat{E}_{t-1}(y|x) + Z\gamma + \delta + u$$
 (2)

V. RESULTS AND ANALYSIS

The results of both models suggest that peer effects do play a role in an individuals decision. Likewise, a comparison of the results from the two models illustrates the effect on the point estimate for Peer Redux Mean when fixed effects are added. Table 2 shows that when fixed effects for command and month/year are included the point estimate for Peer Redux Mean changes both in magnitude and in sign. Column 1 of Table 2, displaying results for model (1), shows a statistically significant point estimate for Peer Redux Mean of .138 (p<.01). Signifying that a 10 percentage point increase in the mean Redux take rate of ones peers is associated with a 1.4 percentage point increase in the likelihood of an individual selecting Redux. Given the overall mean Redux take rate of 19.7 percent across the sample this signifies a 7.1 percent increase in the likelihood of the individual selecting Redux. The coefficients for the other covariates in column 1 are consistent with previous High-3/Redux studies, showing that being black, divorced, and having more dependents are all correlated with selecting Redux. The coefficients for education and AFQT scores also echo previous research. The coefficient of -.017 for "Any College" signifies that members with at least some college experience were, on average, 1.7 percentage points (p<.1) less likely to select Redux. Similarly being in the top 1/3 of AFQT scores reduces the likelihood of an individual selecting Redux by about 3 percentage points. An additional feature illustrated in the results is the effect of being in a "No Default Command". The point estimate suggests that being assigned to a command that completes the election form as prescribed by the NPC increases the likelihood of that individual selecting Redux by 22.4 percentage points (p<.01).¹⁹ This effect is consistent across all models.

¹⁹One question that cannot be answered by the data is whether some members who were in "Default Commands" even knew about the decision. It is possible they were defaulted to High-3 without ever knowing about the Redux option. I consider it unlikely that this happens frequently if at all given that for this to happen multiple individuals in the members Administrative department would have to totally drop the ball and/or neglect their duties. This would likely be noticed by command leadership. Additionally amongst the population of members with 15 YOS the Redux/High-3 decision is widely known.

	(1)	(2)	(3)	(4)
	OLS	Simple	Full	AFQT/Peer Mean
VARIABLES	w/o FE	w/ FE	w/ FE	Interactions
Daar Dadux maan (DDM)	0.138***	-0.213***	-0.199***	
Peer Redux mean (PRM)		(0.0615)	(0.0620)	
PRM/ High-AFQT interaction	(0.0235)	(0.0013)	(0.0020)	-0.290***
1 KW/ High-ArQ1 interaction				(0.0708)
PRM/ Med-AFQT interaction				-0.105
1 KW/ Wed-Ar Q1 interaction				(0.0687)
PRM/ Low-AFQT interaction				-0.146*
1 RW/ Low-711 Q1 Interaction				(0.0808)
Gender (male)	0.0164		0.0238*	0.0235*
Gender (male)	(0.0117)		(0.0137)	(0.0138)
Black	0.0901***		0.0137)	0.0945***
Black	(0.00939)		(0.0109)	(0.0110)
Asian	-0.0174		-0.00463	-0.00376
1 ioidii	(0.0135)		(0.0140)	(0.0141)
Other race	-0.00923		-0.0111	-0.0122
outer race	(0.0147)		(0.0154)	(0.0154)
Single	-0.00284		-0.00765	-0.00848
	(0.0153)		(0.0158)	(0.0158)
Divorced	0.0485***		0.0316**	0.0314**
	(0.0126)		(0.0146)	(0.0146)
Number of dependents	0.0275***		0.0236***	0.0235***
	(0.00269)		(0.00302)	(0.00302)
Any College	-0.0167*		-0.0146	-0.0144
, ,	(0.00942)		(0.0102)	(0.0102)
No default command	0.224***		0.209***	0.208***
	(0.0111)		(0.0290)	(0.0290)
High AFQT (top 1/3)	-0.0304***		-0.0252**	0.0407
	(0.00966)		(0.0113)	(0.0252)
Med AFQT (mid 1/3)	-0.0129		-0.00512	0.0151
	(0.00880)		(0.00986)	(0.0247)
Low AFQT (bottom 1/3)				0.0286
				(0.0278)
Observations	11,036	10,439	10,439	10,439
R-squared	0.064	0.209	0.237	0.238
FE		YES	YES	YES

Standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

Table 2: Regression Results. Data from Navy Personnel Command (personal communication, 2017).

Columns 2-4 of Table 2 illustrate what happens when fixed effects are included in the model. Column 2 shows the model with Peer Redux Mean as the sole independent variable and column 3 shows the full model. With the addition of the fixed effects the point estimate for Peer Redux Mean changes from a positive .14 to -.21 (p<0.01). Implying that a 10 percentage point increase in the mean Redux take rate amongst ones peers reduces the likelihood of an individual selecting Redux by 2.1 percentage points (11 percent). Column 3 illustrates that this effect changes very little when the full list of covariates are added and that, with the exception of "any college", all the explanatory variables significant in model (1) remain significant. Column 4 illustrates what happens when I interact Peer Redux Mean with AFQT scores by tercile. The results show that the point estimates for these interactions remain negative, however, they are more significant for those with AFQT scores in the top 1/3. The point estimate for the interaction of Peer Redux Mean and individuals with high AFQT scores is -.29 (p<0.01), signifying that for someone in the top 1/3 of AFQT scores a 10 percentage point increase in the Redux take-rate of their peers makes them 2.9 percentage points less likely to select Redux. (roughly 15 percent less likely). For those in the middle 1/3 of AFQT scores the point estimate drops to -.11 (marginally significant) and for those in the bottom 1/3 the point estimate is -.15 (p<0.1). Testing whether these three results are statistically different from each other we find that they are. Comparing the top 1/3 with the middle 1/3 we see get an F-stat of 6.29 (P=0.012) and comparing the top 1/3 with the bottom 1/3 an F-stat of 2.85 (p=0.092). These results suggest that those with higher cognitive ability exhibit more of a negative reaction to the choice of their peers. Negative in that they are more likely to go against the Redux decision of these individuals.

The fact that the sign of the point estimates for peer Redux mean become negative with the addition of fixed effects implies that individuals are exhibiting a negative reaction to the choice of their peers. One possible explanation is that this is due to individuals reacting to the dissatisfaction of their peers. If, for example, an individual who was deciding between the two options had one or more peers who regretted choosing Redux and who voiced their dissatisfaction, the individual might be more inclined to select the High-3 op-

tion. The final question from the DMDC Redux survey, asking whether members felt good about their High-3/Redux decision, supports this reasoning. To this question 95 percent of High-3 choosers reported being happy with their choice, while only 63 percent of Redux choosers felt they had made the right decision (DMDC 2008). Its important to note that all survey respondents were still on active duty and in positions where they could potentially influence their peers. Another aspect of the results that is important to note is that the negative point estimate works both ways. It suggests that an individual with a high proportion of peers who selected High-3 is more likely to choose Redux. If we accept the previous reasoning, that individuals are responding to their peers dissatisfaction with choosing Redux, this reaction would still make sense. If an individual has a low proportion of peers who selected Redux the chance of one of them voicing dissatisfaction with their choice decreases. Absent of the negative feedback regarding the Redux option, the individual is more likely to choose it.

The significant change in the peer effects point estimate seen when fixed effects are added, suggests that my initial estimate suffers from omitted variable bias. It appears that environmental factors specific to a members command are significant and were not captured in model (1). Comparing the results of both models it seems that while peers do play a role in a member's decision, so too does the command environment. To understand what the change signifies consider a situation in which the point estimate did not change with the addition of the fixed effects. This would mean that all commands were exactly equal with respect to affecting an individuals decision. Given the large change in our coefficient of interest we see, however, that this is not the case. The data do not afford me the opportunity to separate the effect of the command and the effect of ones peers, however, there are a couple factors that likely play a role. As mentioned the Command Career Counselor and Administrative Officer play an important role in ensuring a member is notified of their CSB/Redux eligibility and that they complete their election form. These individuals represent a likely common shock that could potentially influence a members decision. The fact that some commands follow NPC instruction while others do not is a

good example of the role that these individuals can play in shaping a members decision. In order to better estimate the role of these individuals one would need to be able to identify who the individual Command Career Counselor, Administrative Officer and Command Financial Advisor were at the time a member made their decision. This data set does not afford the ability to identify these individuals, however, if it did, fixed effects could be included for each. Results from such a model would likely provide a more accurate measurement of their influence over the members decision.²⁰

²⁰The change of coefficient sign and magnitude when fixed effects are added is consistent with the finding of Hanushek et al.(2003), who noted a similar change while studying peer effects amongst Texas primary students. When fixed effects were added for class and school their point estimates changed significantly in magnitude and in some cases in sign. A result which they suggest likely stems from common shocks.

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VI. CONCLUSION

I estimate the effect of ones peers on an individual's decision when choosing between two different retirement options in an attempt to determine if an individual's likelihood of selecting the Redux retirement option is independent of the command to which she is assigned. Given a null hypothesis that an individuals decision to chose one option over the other is independent of their command, the results of this study point strongly to rejecting the null. The results suggest that, in fact, a members choice is affected by her command environment as well as her peers. With peers appearing to exhibit a negative effect on the individuals likelihood of choosing one option over the other. Given the statistically significant effect of being in a command that forces members to actively choose their retirement option, it appears a members decision is strongly influenced by the selection process itself and the lack of a clearly defined default option. For DOD leadership the fact that commands who followed NPC instruction, and forced members to actively choose, had higher incidences of Redux selection, highlights a need to further examine the role of defaults in retirement decisions. The results of this study suggest that the Navy policy itself, requiring members to choose, might be leading some individuals to select Redux who would otherwise be defaulted to High-3.

While the CSB/Redux option will go away with the full implementation of BRS there are a couple lessons that can be gleaned from this analysis. Similar to other studies I find that individuals are inclined to follow the path of least resistance when it comes to making financial decisions. I recommend policymakers consider framing retirement decisions such that the path of least resistance leads to the safest and most prudent option with respect to the members financial health. While options such as the CSB represent potential cost savings for the DOD, these savings should not jeopardize the financial well-being of service members. Particularly those members who are least equipped to make complex financial decisions. With regard to how retirement decisions are framed, there

should be checks in place to ensure that election procedures are being followed and that all members are making the decision in the manner intended by Navy leadership. The results of this study suggest that the lack of compliance by some commands led to an "uneven playing field" with regard to the situations surrounding some members decisions.

The impact of adding unit level fixed effects highlights the large role that a member's command plays in influencing her decision. While the data do not afford me the opportunity to distinguish the channels through which these effects operate, the results show that a members decision is influenced by the command to which they are assigned. For consistency and to ensure members are in the best position to choose options that reflect their personal financial goals, the DOD should consider taking retirement decisions out of the control of individual commands. I recommend additional research looking at the feasibility of using base level, professional, financial counselors paired with automated course-ware and an online election processes to address this concern. Per the Navy's official CSB web page, the Redux/High-3 decision represents "one of the most important decisions of anyone's financial life" (NPC CSB n.d.). Additional research should focus on whether Command Career Counselors, Administrative Officers and/or Command Financial Advisors have the requisite knowledge and experience to be guiding service members through this important decision. Considering that roughly 87 percent of commands in this study did not complete the election process as intended, taking the decision out of the hands of individual units might help to standardize future decision processes.

Finally I recommend consideration be given to adding a section to the Armed Services Vocational Aptitude Battery that would contain a handful of questions aimed specifically at measuring financial literacy. This would give DOD leaders and researchers a better idea of where to focus efforts at improving financial literacy across the force. It would also provide a reference data point for each member as they began their career. Having this data point would significantly benefit future studies aimed at estimating the effects of financial literacy on individual financial decision making.

APPENDIX A. INITIAL NOTIFICATION MESSAGE

R 280559Z NOV 16 ZYB FM COMNAVPERSCOM MILLINGTON TN TO NPS MONTEREY CA INFO COMNAVPERSCOM MILLINGTON TN BT

UNCLAS //N01306//

PASS TO OFFICE CODES:

FM COMNAVPERSCOM MILLINGTON TN//PERS-341//

TO NPS MONTEREY CA//CMC/CCC//

INFO COMNAVPERSCOM MILLINGTON TN//PERS-341//

MSGID/GENADMIN/CHNAVPERS//

SUBJ/ELIGIBILITY TO ELECT CSB AND REDUX RETIRED PAY ICO//

(Members Name Deleted)

NARR/OFFICIAL NOTIFICATION ORDERS

BOTH PARTS 1 AND 2 MUST BE READ

AND LISTED INSTRUCTIONS COMPLIED WITH.

RMKS/

- 1. YOUR RECORD IN THE NAVY ENLISTED SYSTEM AND/OR NAVY OFFICER PERSONNEL INFORMATION SYSTEM INDICATES YOUR DATE OF INITIAL ENTRY INTO MILITARY SERVICE (DIEMS) DATE IS 980701 AND YOUR ACTIVE DUTY START DATE (ADSD) IS 020524.
- 2. THIS MESSAGE IS TO NOTIFY YOU THAT YOU ARE UNDER THE "HIGH-3" NON-DISABILITY RETIREMENT SYSTEM. IF YOU SERVE ON ACTIVE DUTY FOR A MINIMUM OF 20 YEARS, YOUR RETIRED PAY WILL BE EQUAL TO THE AVERAGE OF YOUR HIGHEST 36 MONTHS OF BASIC PAY TIMES A MULTIPLIER EQUAL TO 2.5% TIMES YOUR YEARS OF SERVICE. HIGH-3 RETIRED PAY INCREASES ANNUALLY THROUGH COLA EQUAL TO CPI. THE LAW STIPULATES IF YOU ARE A TEMPORARY OFFICER TRANSFERRING TO THE FLEET RESERVE YOUR RETIRED PAY WILL BE CALCULATED ON THE AVERAGE OF THE HIGHEST 36 MONTHS OF BASIC PAY YOU WOULD HAVE RECEIVED IN YOUR PERMANENT ENLISTED RANK. THE LAW ALSO STATES THAT UNDER CERTAIN CONDITIONS YOU MAY BE PLACED UNDER THE "FINAL PAY" RETIREMENT SYSTEM IF YOU ARE REDUCED IN RANK DUE TO DISCIPLINARY ACTION DURING YOUR FINAL 36 MONTHS. 3. IF VERIFICATION BY YOUR COMMAND SHOWS THAT THE DIEMS AND ADSD DATES LISTED ABOVE ACCURATELY REFECTS YOUR DIEMS AND ADSD IN YOUR SERVICE RECORD, YOU WERE UNDER THE "REDUX" NON-DISABILITY RETIREMENT SYSTEM BEFORE THE FY00 NDAA/PUBLIC LAW 106-65. THIS ACT PLACED YOU UNDER HIGH-3 BUT ALLOWS YOU TO ELECT A \$30,000 CAREER STATUS BONUS (CSB) AND REDUX RETIREMENT PAY ON

YOUR 15TH ANNIVERSARY OF ACTIVE DUTY IF YOUR DIEMS IS AFTER 31JUL86, AND YOU ARE ELIGIBLE/AGREE TO REMAIN ON CONTINUOUS ACTIVE DUTY TO YOUR 20TH ANNIVERSARY. CSB IS AVAILABLE IN MULTIPLE ANNUAL INSTALLMENTS OVER AS MANY AS 5 YEARS. OPTIONS INCLUDE A \$30,000 LUMP SUM PAYMENT, TWO \$15,000 INSTALLMENT PAYMENTS, THREE \$10,000 INSTALLMENT PAYMENTS, FOUR \$7,500 INSTALLMENT PAYMENTS, AND FIVE \$6,000 INSTALLEMENT PAYMENTS. CSB IS SUBJECT TO FEDERAL AND STATE TAX; AND WILL AFFECT YOUR POTENTIAL SURVIVOR BENEFIT PLAN PREMIUMS AND ANNUITIES. YOU RECEIVE THE CSB IN ADDITION TO ANY OTHER BONUS, INCENTIVE, OR SPECIAL PAY; AND YOUR AGREEMENT TO REMAIN ON ACTIVE DUTY THROUGH YOUR 20TH ANNIVERSARY RUNS CONCURRENT WITH ANY OTHER CONTRACT, EXTENSION, OR OBLIGATION YOU MAY HAVE INCURRED. IF YOU DO NOT COMPLETE 20 YEARS OF SERVICE AFTER RECEIVING THE CSB, ANY UNEARNED PORTION OF THE CSB WILL BE SUBJECT TO RECOUPMENT BY THE U.S. GOVERNMENT.

- 4. REDUX RETIRED PAY IS 40% OF YOUR HIGH-3-YEAR AVERAGE FOR 20 YEARS OF ACTIVE DUTY SERVICE WITH AN ADDITIONAL 3.5% FOR EACH ADDITIONAL YEAR OF SERVICE UP TO 75%. REDUX RETIRED PAY INCREASES ANNUALLY THROUGH COST OF LIVING ADJUSTMENTS THAT ARE EQUAL TO CPI-1 (1 PERCENTAGE POINT LESS THAN CPI). TWO ADJUSTMENTS TAKE PLACE AT AGE 62. FIRST, AT AGE 62, YOUR RETIRED PAY IS RECALCULA-TED UNDER A NEW FORMULA THAT RESTORES THE VALUE OF THE FIRST 20 YEARS OF SERVICE TO BE WORTH 50% OF THE HIGH-3 AVERAGE. FOR EACH ADDITIONAL YEAR OF SERVICE RETIRED PAY INCREASES BY 2.5% TO A MAXIMUM OF 75%. THE SECOND ADJUSTMENT IS THAT THE AMOUNT OF RETIRED PAY ADJUSTS ONE-TIME AT AGE 62 TO THE VALUE IT WOULD HAVE BEEN IF ANNUAL COLA HAD EQUALED CPI. AFTER THIS ADJUSTMENT, ANNUAL COLA RETURNS TO CPI-1. THE LAW GOVERNING TEMPORARY OFFICERS TRANSFERRING TO THE FLEET RESERVE AND CONDITIONS WHEN YOU MAY BE PLACED UNDER THE "FINAL PAY" RETIREMENT SYSTEM IN A REDUCED RANK DUE TO DISCIPLINARY ACTION APPLIES TO BOTH HIGH-3 AND REDUX RETIREMENT SYSTEMS.
- 5. YOU HAVE A VERY IMPORTANT DECISION TO MAKE IN THE NEXT SIX MONTHS IF YOU ARE ELIGIBLE TO ELECT THE CSB AND REDUX RETIRED PAY SYSTEM. BEFORE YOU MAKE YOUR DECISION, CONSULT SEVERAL SOURCES TO MAKE SURE YOU ARE WELL INFORMED. DISCUSS THE DECISION WITH ADVISORS YOU TRUST, ASSESS YOUR CAREER EXPECTATIONS, DECIDE HOW YOU WILL PROBABLY USE THE CSB MONEY AND WHAT RISKS YOU ARE WILLING TO TOLERATE. WORK THROUGH A BASIC IDEA OF THE OPTIONS AVAILABLE TO YOU.
- 6. THE CENTER FOR NAVAL ANALYSIS (CNA) SUGGESTS THAT THE BEST WAY TO LOOK AT THE CHOICE OF RECEIVING A CSB IS TO CONSIDER THE CAREER STATUS BONUS AS AN EARLY CASH-OUT "LOAN" TO BE PAID BACK LATER BY SMALLER RETIREMENT PAYCHECKS. "CSB HAS A PECULIAR PAYBACK SCHEME. THE SAILOR PAYS NOTHING UNTIL RETIREMENT, PAYS QUITE A BIT FROM THE BEGINNING OF RETIREMENT UNTIL AGE 62, AND

THEN CONTINUES TO PAY BACK BY SMALLER AMOUNTS OVER THE REST OF HIS LIFETIME," READS THE CNA STUDY, AVAILABLE AT HTTP://WWW.CNA.ORG. THE STUDY'S COMPARISON TO A LOAN SHOWS THAT A SAILOR COULD END UP PAYING BACK THE MONEY AT A 9 TO 10 PERCENT INTEREST RATE. MOREOVER, THE TERM OF THE LOAN IS BASED ON HOW LONG SOMEONE LIVES. CHOOSING CSB AND REDUX REDUCES THE INCOME IN RETIREMENT. THE HIGHER THE GRADE AND THE LOWER THE YEARS OF SERVICE AT RETIREMENT, THE MORE THE RETIREMENT INCOME IS REDUCED. "TAKE FOR EXAMPLE AN E-6 WITH 20 YEARS OF SERVICE AT AGE 40. SELECTING CSB AND REDUX AT 15 YEARS. THE SAILOR PAYS AN IMPLICIT INTEREST RATE OF 10.4 PERCENT FOR THE CASH-OUT AND LOSSES \$193,630 AFTER-TAX RETIRMENT INCOME ASSUMING THE SAILOR LIVES TO AN AVERAGE AGE OF 79 YEARS." BOTTOM LINE: CHECK THE FACTS. LOOK AND PLAN FORWARD; ASK QUESTIONS. COMMAND CAREER COUNSELORS, COMMAND FINANCIAL ADVISORS, ADMINISTRATIVE OFFICERS, AND FLEET AND FAMILY SERVICE CENTERS ARE STANDING BY TO ASSIST IN ONE OF THE MOST IMPORTANT DECISIONS OF ANYONE'S FINANCIAL LIFE. 7. UPON RECEIPT OF THIS NOTIFICATION ORDER YOU ARE DIRECTED TO SEE YOUR CCC OR ADMINISTRATIVE OFFICER (AO) TO RECEIVE YOUR COPY OF THE FACT SHEET OF INFORMATION FOR ELIGIBLE CSB MEMBERS. THIS FACT SHEET (AVAILABLE AT HTTP://WWW.NPC.NAVY.MIL/CAREERINFO/ STAYNAVYTOOLS/CAREERTOOLS) EXPLAINS YOUR OPTIONS AND LOOKS AT SOME BASIC CONSIDERATINS ON HOW YOU PLAN TO USE THE CSB AND THE EFFECT YOUR DECISION WILL HAVE ON THE FUTURE VALUE OF THE CSB MONEY. 8. DOD ALSO HAVE A VERY INFORMATIVE WEBSITE THAT DISCUSSES THE CSB. THE SITE INCLUDES AN INTERACTIVE CALCULATOR TO HELP YOU DECIDE WHETHER TO STAY IN THE HIGH-3 RETIRED PAY SYSTEM OR ELECT THE CSB AND REDUX RETIRED PAY SYSTEM. YOU ARE STRONGLY ENCOURAGED TO TAKE A LOOK AT THE WEB ADDRESS HTTP://WWW.DOD.MIL/MILITARYPAY DISCUSS YOUR ALTERNATIVES WITH YOUR FAMILY.

9. YOU HAVE SIX MONTHS AS OF THE DATE OF THIS MESSAGE TO MAKE AN ELECTION DECISION. THERE ARE TWO EXCEPTIONS TO THIS RULE:

A. YOU HAVE SIX MONTHS FROM RECEIPT OF THE MESSAGE IF YOUR REPORTING SENIOR HELD DELIVERY OF THE MESSAGE IN ABEYANCE WHILE YOU WERE ON LEAVE, SICK IN QUARTERS, HOSPITALIZED, ON OFFICIAL TAD/TDY TRAVEL, PERMISSIVE TAD, TAD/TDY/TEMDU TO ATTEND A SCHOOL, DUSTWIN, MIA, CAPTURED/INTERNED/BESEIGED/DETAINED BY A FOREIGN POWER, TERMINALLY/VERY SERIOUSLY/SERIOUSLY ILL OR INJURED, OR SUFFERING AN INCAPACITATING ILLNESS OR INJURY.

B. IF YOUR REPORTING SENIOR HOLDS YOUR ELIGIBILITY IN ABEYANCE DUE TO AN ACTIVE DISCIPLINARY, MEDICAL, OR ADMINISTRATIVE CASE ON YOUR 15TH ANNIVERSARY THAT COULD AFFECT YOUR RETENTION, THEN YOU HAVE SIX MONTHS TO MAKE AN ELECTION AS OF THE DATE YOU RECEIVE FAVORABLE RESULTS ON THE CASE.

10. AN IMPORTANT ELEMENT IN DETERMINING WHETHER YOU HAVE THE RIGHT TO ELECT THE CSB IS YOUR ELIGIBILITY TO REMAIN IN THE SERVICE THROUGH YOUR 20TH ANNIVERSARY OF ACTIVE DUTY. THIS IS A

DETERMINATION YOUR REPORTING SENIOR WILL MAKE BASED ON RETENTION STANDARDS FOUND IN LAW, REGULATIONS, AND INSTRUCTIONS USED FOR REENLISTMENT AND CONTINUATION.

A. IF YOU ARE A MEMBER OF THE REGULAR NAVY (USN) AND TRAINING AND ADMINISTRATION OF THE RESERVES (FTS) YOU ARE ELIGIBLE TO ELECT THE CSB/REDUX IF YOU QUALIFY FOR RETENTION OR CONTINUATION TO YOUR 20TH ANNIVERSARY, EVEN IF YOUR PRESENT CONTRACT EXPIRES PRIOR TO YOUR 20TH ANNIVERSARY.

- B. IF YOU ARE A RESERVIST ON ACTIVE DUTY WHO CANNOT REMAIN ON CONTINUOUS ACTIVE DUTY TO YOUR 20TH ANNIVERSARY OF DAY FOR DAY ACTIVE DUTY THEN YOU ARE NOT ELIGIBLE TO ELECT THE CSB/REDUX. THE LAW PROVIDES FOR YOUR RETIREMENT UNDER 10 U.S.C.12731 WHICH WAS NOT MODIFIED BY THE FY-00 NDAA/P.L. 106-65 ALLOWING ELECTION OF THE CSB/REDUX.
- 11. YOUR REPORTING SENIOR IS STANDING BY TO GIVE YOU YOUR CSB/REDUX RETIRED PAY ELECTION FORM WITH SECTIONS I & II COMPLETED AND TO COUNSEL YOU ON HIS RETENTION DETERMINATION. MAKE AN APPOINTMENT WITH YOUR REPORTING SENIOR AS SOON AS YOU ARE READY TO BEGIN THE ELECTION PROCESS.
- 12. WHEN YOU MEET WITH YOUR REPORTING SENIOR YOU WILL BE GIVEN A COPY OF THE FORM. SECTION I WILL HAVE YOUR NAME, SSN, RANK, PAYGRADE, BRANCH OF SERVICE, DIEMS, ADSD, AND THE DATE OF THIS NOTIFICATION ORDER MESSAGE. REVIEW THE INFORMATION IN SECTION I CAREFULLY AND POINT OUT ANY NEEDED CORRECTIONS.
- 13. SECTION II OF THE ELECTION FORM WILL BE COMPLETED BY YOUR REPORTING SENIOR BASED ON A DETERMINATION OF YOUR ELIGIBILITY AS DETERMINED BY LAW AND NAVY POLICY, TO CONTINUE ON ACTIVE DUTY UNTIL COMPLETION OF 20 YEARS OF ACTIVE DUTY SERVICE. YOUR REPORTING SENIOR HAS THREE OPTIONS:

A. HE INDICATES YOU ARE ELIGIBLE TO ELECT THE CSB IF YOU QUALIFY FOR RETENTION ON CONTINUOUS ACTIVE DUTY THROUGH YOUR 20TH ANNIVERSARY OR,

B. HE INDICATES YOU ARE NOT ELIGIBLE TO ELECT THE CSB AND THE REASON YOU ARE NOT ELIGIBLE TO REMAIN ON CONTINUOUS ACTIVE DUTY, OR

C. HE INDICATES YOU ARE NOT ELIGIBLE TO ELECT THE CSB WHILE UNDER DISCIPLINARY, MEDICAL, OR ADMINISTRATIVE PROCEEDINGS. IN THIS CASE, HE INDICATES THE REASON IS FINAL DETERMINATION IS BEING HELD IN ABEYANCE PENDING A FAVORABLE DETERMINATION ON YOUR DISCIPLINARY, MEDICAL, OR ADMINISTRATIVE PROCEEDINGS.

14. IF YOU ARE ELIGIBLE AND DESIRE TO ELECT CSB/REDUX, READ SECTION IV BLOCK 12 THOROUGHLY, ELECT THE PAYMENT OPTION YOU PREFER, AND SIGN/DATE YOUR AGREEMENT TO REMAIN ON ACTIVE DUTY IN EXCHANGE FOR THE CSB AND REDUX RETIRED PAY SYSTEM. LEAVE SECTION III AND V BLANK. RETURN THE FORM TO YOUR CCC OR AO SO THEY CAN WITNESS YOUR ELECTION IN SECTION IV BLOCK 13, COMPLETE SECTION VI, AND PROCESS YOUR ELECTION. THE LAW

ALLOWS YOU TO CONTINUE UNDER YOUR EXISTING CONTRACT, EXTENSION, OR OTHER AGREEMENT. THE EXECUTION OF A NEW REENLISTMENT CONTRACT FOR THE SOLE PURPOSE OF ELECTING THE CSB/REDUX IS NOT REQUIRED OR ENCOURAGED. BY LAW, THE CSB/REDUX OBLIGATION MAY RUN CONCURRENT WITH OTHER OBLIGATIONS TO THE GOVERNMENT, AND THE CSB MAY BE PROVIDED IN ADDITION TO OTHER BONUSES, SPECIAL OR INCENTIVE PAYS.

- 15. IF YOU ARE ELIGIBLE AND ELECT NOT TO RECEIVE THE CSB, READ SECTION V BLOCK 14 THOROUGHLY AND SIGN/DATE YOUR ELECTION TO REMAIN UNDER THE HIGH-3 RETIRED PAY SYSTEM. LEAVE SECTIONS III AND IV BLANK. RETURN THE FORM TO YOUR CCC OR AO SO THEY CAN WITNESS YOUR ELECTION NOT TO RECEIVE THE CSB IN SECTION V BLOCK 15, AND PROCESS YOUR ELECTION.
- 16. IF YOU ARE NOT ELIGIBLE TO ELECT THE CSB READ SECTION III BLOCK 10 THOROUGHLY AND SIGN/DATE YOUR STATEMENT OF UNDERSTANDING THAT YOUR ELIGIBILITY DOES NOT PRECLUDE YOU FROM CONTINUING SERVICE TO RETIREMENT IF THE THE NAVY PERMITS. LEAVE SECTIONS IV AND V BLANK. RETURN THE FORM TO YOUR CCC OR AO SO THEY CAN WITNESS YOUR STATEMENT OF UNDERSTANDING IN SECTION III, AND PROCESS YOUR STATEMENT OF UNDERSTANDING.
- 17. YOUR ELECTION IS CONSIDERED TO BE EFFECTIVE AND IRREVOCABLE ON EITHER:
 - A. YOUR 15TH ANNIVERSARY OF ACTIVE DUTY, OR
- B. THE DATE YOU MAKE YOUR ELECTION IN CASES WHERE YOUR OPPORTUNITY TO MAKE AN ELECTION SURPASSES YOUR 15TH ANNIVERSARY.

 18. THE LAW PROVIDES THAT INITIAL PAYMENT OF A CSB WILL BE PAID NO LATER THAN THE FIRST MONTH THAT BEGINS ON OR AFTER THE DATE THAT IS 60 DAYS AFTER THE DATE THE ELECTION IS EFFECTIVE. IF INSTALLMENT PAYMENTS ARE ELECTED, THE SECOND AND SUBSEQUENT INSTALLMENTS ARE PAID ON 15 JANUARY OF EACH SUCCEEDING CALENDAR YEAR.
- 19. DEFENSE FINANCE AND ACCOUNTING SERVICE (DFAS) WILL ADVISE YOU OF THE TAXABILITY OF CSB PAYMENTS. GENERALLY, THE CSB IS SUBJECT TO THE SAME TAX CONSIDERATIONS AS ANY OTHER BONUS PAYMENT. THE CSB, IF TAXABLE, IS INCOME AS OF THE DATE ON WHICH THE PAYMENT IS ACTUALLY MADE TO THE MEMBER. IF THE MEMBER IS OTHERWISE ELIGIBLE FOR COMBAT ZONE OR QUALIFIED HAZARDOUS DUTY AREA (QHDA) TAX EXCLUSION ON THE EFFECTIVE DATE OF THE CSB/REDUX ELECTION THE CSB WILL NOT BE CONSIDERED TAXABLE INCOME WITHIN ALLOWABLE LIMITS.
- 20. THE CSB IS AN ACTIVE DUTY BONUS UNDER THE PROVISIONS OF TITLE 37, U.S. CODE. IT IS NOT MILITARY RETIRED PAY AND, THEREFORE, IS NOT SUBJECT TO DIVISION UNDER THE UNIFORM SERVICES FORMER SPOUSES' PROTECTION ACT.
- 21. IF YOU FAIL TO SERVE CONTINUOUSLY ON ACTIVE DUTY UNTIL YOUR 20TH ANNIVERSARY, THE LAW STIPULATES THAT A PROPORTIONATE SHARE OF THE CSB MUST BE REPAID. THE SECRETARY OF DEFENSE HAS WAIVED

BONUS REPAYMENT IF YOU DIE ON ACTIVE DUTY, ARE SEPARATED OR RETIRED AS A RESULT OF A PHYSICAL DISABILITY UNDER CHAPTER 61 OF TITLE 10 U.S. CODE, OR SEPARATE UNDER A SERVICE OFFER FOR EARLY RETIREMENT (SUCH AS TERA) OR SEPARATION PROGRAM. THIS WAIVER IS NOT AVAILABLE IF YOU ARE SEPARATED DUE TO MISCONDUCT OR IF THE WAIVER WOULD BE INCONSISTENT WITH OTHER PRESCRIBED LAW, REGULATION, OR POLICY.

22. AS A CSB ELIGIBLE SAILOR, YOU HAVE A VERY IMPORTANT DECISION TO MAKE NOW THAT YOU HAVE RECEIVED YOUR OFFICIAL GENADMIN NOTIFICATION MESSAGE AND THAT DECISION IS NOT AN EASY ONE. YOUR DECISION CONCERNING CSB AND YOUR RETIRED PAY WILL BECOME IRREVOCABLE AFER THE EFFECTIVE DATE OF YOUR ELECTION AND AFFECT YOUR RETIRED PAY SO I URGE YOU TO LEARN AS MUCH AS YOU CAN ABOUT YOUR OPTIONS AND CONSULT SEVERAL DIFFERNT SOURCES TO MAKE SURE YOU ARE WELL INFORMED. THE CENTER FOR CAREER DEVELOPMENT (CCD) WEBSITE AT HTTP://WWW.NPC.NAVY.MIL/ CAREERINFO/STAYNAVYTOOLS/CAREERTOOLS/ AND THE DOD WEBSITE AT HTTP://WWW.DOD.MIL/MILITARYPAY/ MAY BE GOOD PLACES TO START. BEFORE YOU MAKE THAT FINAL DECISION, DISCUSS IT WITH ADVISORS YOU TRUST, ASSESS YOUR CAREER EXPECTATIONS, DECIDE HOW YOU PROBABLY WILL USE THE CSB MONEY, AND WHAT RISKS YOU ARE WILLING TO TOLERATE. YOU WILL WANT TO PUT ENOUGH EFFORT INTO THE DECISION TO MAKE YOURSELF COMFORTABLE WITH YOUR CHOICE. COMMAND CAREER COUNSELORS AND COMMAND FINANCIAL ADVISORS ARE STANDING BY TO ASSIST YOU WITH YOUR DECISION, BUT ULTIMATELY, ONLY YOU CAN DETERMINE WHICH OPTION IS MORE ADVANTAGEOUS FOR YOU BASED ON YOUR OWN UNIQUE CIRCUMSTANCES AND PREFERENCES.

PART TWO

- 23. FOLLOWING GUIDANCE ESTABLISHES COMMAND RESPONSIBILITY AND PROCEDURES TO NOTIFY/COUNSEL SNM ON ELIGIBILITY TO ELECT THE CSB/REDUX RETIRED PAY SYSTEM.
- 24. DELIVER THE MESSAGE TO SNM WITHIN THREE WORKING DAYS OF RECEIPT. COMMAND AUTHORIZED TO HOLD DELIVERY IN ABEYANCE WHILE SNM IN ON LEAVE, SIQ, HOSPITALIZED, ON OFFICIAL TAD/TDY TRAVEL, PERMISSIVE TAD, OR TAD/TDY/TEMDU TO ATTEND SCHOOL.
- 25. REPORTING COMMAND IS DIRECTED TO CANCEL NOTIFICATION ORDER BY MESSAGE TO ADDRESSEES IF:
- A. SNM IS DECEASED. REFERENCE PERSONNEL CASUALTY REPORT MESSAGE AS AUTHORITY TO CANCEL NOTIFICATION ORDER DUE TO DEATH.
- B. SNM HAS A FINAL DETERMINATION BY SEPARATION AUTHORITY THAT DIRECTS SEPARATION, DISCHARGE, OR DROPPING FROM THE ROLLS. REFERENCE SEPARATION AUTHORITY DOCUMENTATION AS AUTHORITY TO CANCEL NOTIFICATION ORDER.
- C. SNM'S RESIGNATION HAS BEEN ACCEPTED BY THE SECRETARY OR CHNAVPERS. REFERENCE ACCEPTANCE DOCUMENTATION AS AUTHORITY TO CANCEL NOTIFICATION ORDER.
 - D. SNM IS SEPARATED, DISCHARGED, OR DROPPED FROM THE ROLLS.

REFERENCE SEPARATION DOCUMENTATION AS AUTHORITY TO CANCEL NOTIFICATION ORDER.

- E. SNM IS ABSENT WITHOUT LEAVE, DESERTED, UNDER U.S. CIVIL OR MILITARY CONFINEMENT. REFERENCE SUPPORTING DOCUMENTATION AS AUTHORITY TO CANCEL NOTIFICATION ORDER.
- 26. REPORTING COMMAND DIRECTED TO FORWARD NOTIFICATION ORDER TO INTERMEDIATE AND ULTIMATE DUTY STATIONS FOR ACTION IF SNM HAS DETACHED. NOTIFY BY MESSAGE THE ULTIMATE AND INTERMEDIATE DUTY STATIONS AND ADDRESSES OF THIS MESSAGE REFERENCING THE PCS TRANSFER ORDERS AS AUTHORITY FOR FORWARDING NOTIFICATION TO SNM'S PRESENT STATION.
- 27. REPORTING COMMAND DIRECTED TO FORWARD NOTIFICATION ORDER TO CASUALTY ASSISTANCE BRANCH (PERS-621) IF SNM IS DUSTWIN, MIA, CAPTURED/INTERNED/BESIEGED/DETAINED BY A FOREIGN POWER, TERMINALLY/VERY SERIOUSLY/SERIOUSLY ILL OR INJURED,OR SUFFERING AN INCAPACITATING ILLNESS OR INJURY. REFERENCE PERSONNEL CASUALTY REPORT MESSAGE AS AUTHORITY FOR FORWARDING NOTIFICATION ORDER TO CHNAVPERS (PERS-621).
- 28. ADMINISTRATIVE OFFICERS ARE RESPONSIBLE FOR ENSURING THIS MESSAGE IS DELIVERED TO THE COMMISSIONED OFFICERS AND WARRANT ASSINGED TO THE COMMAND; AND THAT THEIR ELECTIONS ARE PROCESSED THROUGH DFAS USING THE CSB/REDUX ELECTION SCREEN IN THE FORCE MANAGEMENT SYSTEM (FORMAN).
- 29. COMMAND CAREER COUNSELORS ARE RESPONSIBLE FOR ENSURING THIS MESSAGE IS DELIVERED TO ENLISTED MEMBERS OF YOUR COMMAND; AND THAT THEIR ELECTIONS ARE PROCESSED THROUGH DFAS USING THE CSB/REDUX ELECTION SCREEN IN FORMAN.
- 30. ADMINSTATIVE OFFICERS AND COMMAND CAREER COUSELORS RESPONSIBILITIES INCLUDE:
- A. VERIFYING THE ACCURACY OF THE MEMBER'S DIEMS DATE LISTED IN THIS MESSAGE AND REPORTING ANY DISCREPANCY FOLLOWING THE PROCEDURES PUBLISHED IN THE PROGRAM NAVADMINS.
 - B. ADVISING MEMBERS THAT:
- (1) THE DIEMS DATE LISTED IN THE MEMBER'S CSB NOTIFICATION MESSAGE AND FORCE MANAGEMENT SYSTEM IS TAKEN FROM THEIR RECORD IN THE NAVY ENLISTED SYSTEM (NES) OR THE OFFICER PERSONNEL INFORMATION SYSTEM (OPINS) RECORD.
- (2) THE MEMBER'S OFFICIAL DIEMS DATE IS THE DATE LISTED ON THEIR FIRST ENLISTMENT, INDUCTION, OR COMMISSIONING DOCUMENT.
- (3) THE COMMAND HAS REVIEWED THE MEMBER'S FIRST ENLISTMENT, INDUCTION, OR COMMISSIONING DOCUMENT IN THEIR SERVICE RECORD AND VERIFIED THEIR ELIGIBILITY OR INELIGIBILITY TO MAKE A CSB/REDUX OR HIGH-3 RETIRED PAY ELECTION.
- (4) ACTION HAS BEEN TAKEN TO CORRECT ANY DISCREPANCY IN THE MEMBER'S DIEMS DATE IN THEIR NES OR OPINS RECORD.
- (5) PERS 341 WILL ALSO CONDUCT A QUALITY CONTROL OF THE MEMBER'S DIEMS DATE AND VERIFY WHETHER THE MEMBER IS ELIGIBLE

- BEFORE TRANSMITTING CSB ELECTIONS FOR PAYMENT.
- (6) SHOULD PERS 341 DISCOVER THE MEMBER IS INELIGIBLE TO MAKE THE ELECTION, THEY HAVE BEEN DIRECTED TO CANCEL THE ELECTION AND NOTIFY THE COMMAND OF THE ACTION.
- C. ENSURING GENADMIN NOTIFICATION ORDER MESSAGES ARE DELIVERED TO ELIGIBLE MEMBERS OF THEIR COMMAND.
- D. COMPLETING THE ELECTION FORM SECTION I "PERSONAL IDENTIFICATION" NAME, SSN, RANK/PAY, GRADE/BRANCH, DIEMS, DATE FOR DETERMINATION OF ACTIVE DUTY SERVICE COMPLETED (ADSD ON NAVPERS FORM), AND DATE OF NOTIFICATION (DTG OF CSB GENADMIN NOTIFICATION MESSAGE ON NAVPERS FORM).
- E. ENSURING THAT THE MEMBER'S REPORTING SENIOR COMPLETES THE ELECTION FORM SECTION II.
 - F. ADVISING MEMBERS THAT:
- (1) ONLY TSP PARTICIPANTS WHO HAVE ELECTED TO CONTRIBUTE A PERCENTAGE OF THEIR BONUSES CAN DEPOSIT A PORTION OF THEIR CSB TO TSP.
- (2) IF THEY HAVE A TSP ACCOUNT, THEY CAN COMPLETE A TSP-U-1 FORM OR REVISE THEIR TSP ELECTION IN E/MSS AT ANY TIME TO ELECT TO CONTRIBUTE A PERCENTAGE OF THEIR BONUSES. HOWEVER, THEIR TSP ELECTION SHOULD BE SUBMITTED AT LEAST 60 DAYS PRIOR TO THEIR CSB ELECTION EFFECTIVE DATE.
 - G. ADVISING MEMBERS THAT:
- (1) THE PAYMENT OPTION THEY ELECT IS IRREVOCABLE AND CANNOT BE MODIFIED ON OR AFTER THEIR CSB ELECTION EFFECTIVE DATE.
- (2) REQUESTS FOR ADVANCE AND REMAINING INSTALLMENT PAYMENTS WILL ONLY BE ACCEPTED IF THE MEMBER IS EXPERIENCING A HARDSHIP.
- A) ADVANCE PAYMENT IS PAYMENT OF ONE OR MORE INSTALLMENTS DUE IN A FUTURE FISCAL YEAR, AND REMAINING AMOUNT IS PAYMENT OF ALL REMAINING INSTALLMENTS IN ONE PAYMENT.
- B) ADVANCE AND REMAINING INSTALLMENT PAYMENT REQUIRES DEPUTY CHIEF OF NAVAL OPERATIONS (MANPOWER AND PERSONNEL) N130G APPROVAL.
- C) REQUEST FOR ADVANCE OR REMAINING PAYMENT MUST
 BE IN WRITING AND INCLUDE INFORMATION ON ANY ADVANCE
 BONUS/SPECIAL/INCENTIVE PAYMENTS ALREADY RECEIVED BY MEMBER,
 CERTIFIED COPY OF MEMBER'S CURRENT EVALUATION OR FITNESS REPORT,
 CERTIFIED COPY OF ANY CURRENTLY APPROVED EXCEPTIONAL FAMILY OR
 HUMANITARIAN TRANSFER DOCUMENT/S/, SPECIFIC REASON/S/ FOR
 REQUESTING HARDSHIP PAYMENT, ITEMIZED LIST OF INCOME AND
 FINANCIAL LIABILITIES FOR ALL DEBTS (INCLUDING MONTHLY
 PAYMENT/AMOUNT OWED FOR EACH), AND THE COMMANDING OFFICER'S:
- 1) VERIFICATION THAT THE MEMBER IS STILL ELIGIBLE TO REMAIN CONTINUOUSLY ON ACTIVE DUTY THROUGH THEIR 20TH ANNIVERSARY,
 - 2) VERIFICATION THAT THE HARDSHIP EXISTS, AND

- 3) RECOMENDATION
- D) AN ADVANCE AND REMAINING PAYMENT REQUEST WITHOUT THE ABOVE INFORMATION WILL BE RETURNED WITH NO ACTION.
 - H. ENSURING THAT THE MEMBERS COMPLETE:
- (1) SECTION III OF THE FORM IF THEY ARE NOT CURRENTLY ELIGIBLE FOR CSB;
 - (2) SECTION IV IF THEY ARE ELIGIBLE AND ELECT CSB;
- (3) AND SECTION V IF THEY ARE ELIGIBLE BUT ELECT TO REMAIN UNDER THE HIGH-3 RETIRED PAY SYSTEM AND NOT RECEIVE THE CSB.
- I. ENSURING THAT ALL MEMBERS WHO ELECT THE CSB IN SECTION IV OF THE FORM ALSO SELECTS A PAYMENT OPTION. THIS INCLUDES MEMBERS WHO MADE AN ELECTION PRIOR TO RELEASE OF THIS NAVADMIN WHO HAVE NOT YET REACHED THEIR CSB ELECTION EFFECTIVE DATE.
- J. WITNESSING THE MEMBER'S ELECTION ON THE FORM IN SECTION III, BLOCK 11; SECTION IV, BLOCK 13; OR SECTION V, BLOCK 15 AS APPROPRIATE.
- K. COMPLETING SECTION IV, SERVICE RECORDING OF ELECTION IF THE MEMBER IS ELIGIBLE AND ELECTS THE CSB/REDUX. THE FOLLOWING EXAMPLES ARE PROVIDED TO HELP AO'S AMD CCC'S UNDERSTAND WHAT DATE TO USE IN BLOCK 16 FOR THE CSB ELECTION EFFECTIVE DATE.

EXAMPLE ONE: MEMBER'S ADSD IS 1 FEB 88 MAKING 1 FEB 03 SNM'S 15TH ANNIVERSARY OF ACTIVE SERVICE. MEMBER'S OFFICIAL NOTIFICATION MESSAGE DTG IS 1 AUG 02. MEMBER'S REPORTING SENIOR COMPLETES SECTION II OF FORM INDICATING MEMBER IS ELIGIBLE FOR RETENTION. MEMBER SIGNS SECTION IV OF FORM ON 20 AUG 02 ELECTING CSB/REDUX WITH 1 (LUMP SUM \$30,000) PAYMENT. MEMBER'S CSB ELECTION EFFECTIVE DATE IS SNM'S 15TH ANNIVERSARY OF ACTIVE DUTY ON 1 FEB 03.

EXAMPLE TWO: MEMBER'S ADSD IS 15 MAR 87 MAKING 15 MAR 02 HIS 15TH ANNIVERSARY OF ACTIVE SERVICE. MEMBER'S OFFICIAL GENADMIN NOTIFICATION MESSAGE DTG IS 15 SEP 01. MEMBER'S REPORTING SENIOR COMPLETES SECTION II OF THE DD FORM 2839 INDICATING MEMBER IS NOT ELIGIBLE TO ELECT CSB AND GIVES THE 'REASON' AS "FINAL DETERMINATION IS BEING HELD IN ABEYANCE PENDING A FAVORABLE DETERMINATION ON MEDICAL PROCEEDINGS." ON 10 NOV 02 MEDICAL BOARD FINDS THE MEMBER IS FIT FOR DUTY. MEMBER'S REPORTING SENIOR REVISES SECTION II OF THE MEMBER'S DD FORM 2839 INDICATING MEMBER IS ELIGIBLE. MEMBER HAS UNTIL 10 MAY 03 (6 MONTHS) TO MAKE AN CSB/REDUX ELECTION. MEMBER SIGNS SECTION V, ELECTING TO REMAIN UNDER THE HIGH-3 RETIRED PAY SYSTEM ON 15 DEC 02. MEMBER'S ELECTION EFFECTIVE DATE IS 15 DEC 02. HIS CSB ELECTION EFFECTIVE DATE IS HIS ELECTION SIGNATURE DATE BECAUSE HE IS MAKING HIS ELECTION AFTER HIS 15TH ANNIVERSARY OF ACTIVE DUTY.

- L. ENTERING MEMBER'S CSB/REDUX ELECTION DATA IN FORMAN AND TRANSMITTING DATA TO DFAS FOR PAYMENT.
- (1) TO POST CSB ELECTION INFORMATION, AO'S AND CCC'S REQUIRE ACCESS TO CICS AND ACCESS OPINS/FORMAN, INSTRUCTIONS FOR

COMPLETING AND PROCESSING ARE AVAILABLE ATTO MODIFY AN EXISTING HTTP://WWW.NPC.NAVY.MIL/ABOUTUS/NPC/ITIM/DATAMANAGEMENT/

(2) A COMPUTER APPLICATION THAT FACILITATES ACCESS TO CICS, OPINS/FORMAN IS AVAILABLE AT:

HTTP://www.npc.navy.mil/aboutus/npc/itim/datamanagement/
CORPORATESYSTEMS/FORMAN/ REFER TO CSB/REDUX
PROGRAM NAVADMINS FOR INSTRUCTIONS ON DOWNLOADING THE PROGRAM, A COPY OF THE CSB USER MANUAL, AND ENTERING CSB/REDUX ELECTION DATA IN OPINS/FORMAN.

- M. TRACKING WHETHER A NOTIFCATION MESSAGE HAS BEEN RELEASED ON A MEMBER BY ENTERING THE MEMBER'S SSN ON THE CSB ELECTION SCREEN.
- (1) IF THE SCREEN ACTIVATES, A MESSAGE HAS BEEN RELEASED AND THE DTG OF THE MEMBER'S MESSAGE WILL SHOW UP IN THE LOWER LEFT HAND CORNER OF THE SCREEN. THIS DTG CAN BE USED TO REQUEST A TRACKER BETWEEN YOUR MESSAGE CENTER AND THE MILLINGTON MESSAGE CENTER, IF IT WAS NOT RECEIVED.
- (2) MESSAGE CENTERS OFTEN DELETE MESSAGE TAPES ONCE EVERY 7 TO 30 DAYS. IF THEY HAVE ALREADY DELETED THE MESSAGE, DELIVER A COPY OF THIS NAVADMIN TO THE MEMBER AND USE THESE STEP-BY-STEP DIRECTIONS TO PROCESS THEIR ELECTION. THE INFORMATION IN THIS NAVADMIN DUPLICATES THE INFORMATION WE ARE REQUIRED BY LAW TO PROVIDE EACH MEMBER IN AN INDIVIDUAL NOTIFICATION MESSAGE.
- (3) IF THE FORMAN CSB ELECTION SCREEN REMAINS BLANK IT MEANS THAT WE HAVE NOT SENT A MESSAGE YET.
- A) AT MIDNIGHT EACH DAY WE RUN AN AUTOMATED QUERY THROUGH THE NAVY ENLISTED FILE (NES) AND OFFICER PERSONNEL INFORMATION SYSTEM (OPINS) GATHERING THE SSN OF EACH ACTIVE DUTY MEMBER WHO HAS REACHED THEIR 14 AND 1/2 YEAR ANNIVERSARY OF ACTIVE DUTY BASED ON THEIR ADSD.
- B) WE THEN RUN A QUERY THROUGH THAT GROUP OF EACH MEMBER WHO HAS A DIEMS DATE OF 1AUG86 OR LATER. THEN WE RUN A QUERY FOR ANYONE WHO HAS NOT RECEIVED A CSB GENADMIN NOTIFICATION MESSAGE.
- C) THE SYSTEM CREATES AN AUTOMATED MESSAGE FOR EACH MEMBER IN THIS GROUP AND ASSIGNS THE MESSAGE A DTG.
- D) IF A MEMBER HAS A BLANK DIEMS DATE, ADSD DATE, OR HAS NOT BEEN DIARIED INTO A COMMAND UIC IN NES OR OPINS THERE IS NO WAY FOR THE SYSTEM TO CATCH THEM IN EACH NIGHTS QUERY.
- E) YOU CAN CHECK TO SEE IF A MEMBER HAS THE DIEMS DATE IN NES OR OPINS BY LOOKING AT THE MEMBER'S LES.
- F) YOU CAN CHECK TO SEE IF A MEMBER HAS BEEN DIARIED INTO A COMMAND UIC AND HAS A ADSD IN NES OR OPINS BY LOOKING AT THE COMMAND'S EDVR OR ODVR.
- G) IF THE UIC OR DATES ARE MISSING CONTACT YOUR PERSONNEL OFFICE AND PERS 341 TO CORRECT NES OR OPINS SO THAT THE CSB AUTOMATED SYSTEM WILL GENERATE A MESSAGE.

- N. TRACKING THE STATUS OF A CSB ELECTION.
- (1) ONCE A CSB ELECTION IS ENTERED INTO FORMAN, THE DATA RESIDES THERE, INTACT, FOR AS LONG AS THE MEMBER REMAINS IN THE NAVY
- (2) ON THE MEMBER'S CSB ELECTION EFFECTIVE DATE THE CSB DATA IN FORMAN IS TRANSMITTED TO DFAS FOR PAYMENT USING THE 08 FID (FOR OFFICERS) AND THE 31 FID (FOR ENLISTED PERSONNEL).
- (3) THE STATUS OF AN ELECTION CAN BE TRACKED BY USING THE FORMAN ELECTION SCREEN PRIOR TO THE MEMBER'S CSB ELECTION EFFECTIVE DATE.
- (4) AFTER THE CSB ELECTION EFFECTIVE DATE THE STATUS
 OF AN ELECTION CAN BE TRACKED BY CONTACTING YOUR LOCAL PSD OR
 SHIP'S PERSONNEL OFFICE AND REQUESTING THEY CHECK FOR A FID 08
 OR A FID 31 ENTRY.
- (5) DO NOT CONTACT DFAS PRIOR TO A MEMBER'S CSB ELECTION EFFECTIVE DATE FOR THE STATUS ON A CSB PAYMENT. DFAS WILL NOT HAVE RECEIVED THE FID PRIOR TO THAT DATE.
- O. MAINTAINING A COMMAND COPY OF THE MEMBER'S CSB/REDUX ELECTION FORM WHILE THE MEMBER IS ASSIGNED TO THE COMMAND AND FORWARDING THE ORIGINAL COPY OF THE CSB/REDUX ELECTION FORM TO COMMANDER, NAVY PERSONNEL COMMAND (PERS-312C) FOR INCLUSION IN THE MEMBER'S PERMANENT SERVICE RECORD. EACH CCC MUST ALSO FORWARD A COPY OF THE CSB/REDUX ELECTION FORM TO THER SHIP PERSONNEL OFFICE OR PERSONNEL SUPPORT DETACHMENT FOR INCLUSION IN THE MEMBER'S FIELD SERVICE RECORD.
- P. PROVIDING THE MEMBER WITH A COPY OF THE COMPLETED CSB/REDUX ELECTION FORM FOR THEIR PERSONAL FILES.
- 31. FOR ASSISTANCE IN OBTAINING ACCESS CALL TOLL FREE:-877-589-5991, COMM:504-697-5442, DSN: 647-5442. REQUESTS MAY BE FAXED TO COMM 901.874.2660 DSN 882.2660, OR EMAILED TO MILL P341SYSACCESS@NAVY.MIL IN A PDF FORMAT.

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APPENDIX B. SECOND NOTIFICATION MESSAGE

RTTUZYUW RUCCBWF0030 0611825-UUUU--RHMCSUU. ZNR UUUUU R 020153Z MAR 17 ZYB FM COMNAVPERSCOM MILLINGTON TN// PERS-341// TO NPS MONTEREY CA INFO COMNAVPERSCOM MILLINGTON TN// PERS-341// ВТ UNCLAS //N01800// PASS TO OFFICE CODES: FM COMNAVPERSCOM MILLINGTON TN// PERS-341// TO NPS MONTEREY CA//CMC/CCC//

INFO COMNAVPERSCOM MILLINGTON TN// PERS-341//

MSGID/GENADMIN/CNO WASH DC//

SUBJ/ELIGIBILITY TO ELECT CSB AND REDUX RETIRED PAY ICO

(Members Name Deleted)

REF/A/RMG/CNO WASHINGTON DC/280559ZNOV16//

REF/B/RMG/CNO WASHINGTON DC/151142ZOCT02//

NARR/REF A IS SNM ELIGIBILITY TO ELECT CAREER STATUS BONUS (CSB) AND REDUX RETIRED PAY NOTIFICATION GENADMIN MESSAGE. REF B IS NAVADMIN 344/02//

RMKS/

- 1. THIS IS SECOND AND FINAL NOTIFICATION. SNMS OPPORTUNITY TO ELECT CSB WILL SOON EXPIRE. TO DATE, NO ACTION HAS BEEN TAKEN WITH REGARD TO REF A IN THE FORCE MANAGEMENT (FORMAN) SYSTEM. SNM MUST, PER REF B, ELECT CSB/REDUX (IF DESIRED) PRIOR TO 15TH ANNIVERSARY. NO ENTRY WILL RESULT IN AUTOMATIC DEFAULT TO HIGH-3 RETIREMENT PROGRAM. ADMIN OFFICERS AND COMMAND CARREER COUNSELORS, PER REFS A AND B, VALIDATE ELIGIBILITY, WORK WITH SMN TO COMPLETE AND SUBMIT THE CSB FORM, AND MAKE ENTRY INTO FORMAN. THE FORMAN CSB/REDUX ELECTION SCREEN IS THE TOOL USED TO TRANSMIT SNM ELECTION TO DFAS FOR PAYMENT. REFER TO STEP-BY-STEP DIRECTIONS IN REFS A OR B FOR PROCESSING PRIOR TO ELIGIBILITY EXPIRATION.
- 2. IF EXPERIENCING PROBLEMS LOGGING ONTO FORMAN, FOR ASSISTANCE CALL TOLL FREE: 877-589-5991, COMM: 504-697-5442, DSN: 647-5442 TO ESTABLISH A NEW ACCOUNT, FOLLOW PROCEDURES OUTLINED AT HTTP://WWW.NPC.NAVY.MIL/ABOUTUS/NPC/ITIM/DATAMANAGEMENT/ CORPORATESYSTEMS/FORMAN/ FOR INFORMATION ON PROCESSING CSB REQUESTS, AND REVIEW FAQS.

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